Introduction to the Linux Command Line

You are the owner of an apartment in the 'Ubuntu city apartment complex.' You don't live in the apartment but have been unable to find a tenant for months. It's becoming a struggle to pay off the mortgage for the apartment, you are getting desperate. Today you are meeting with a potential tenant in hopes that you can work something out.

1. The potential tenant is supposed to be there soon, you better get down to the complex so that you can let them in. (go to the /home directory which is where all the ubuntu users on your computer live)

```
cd /home
```

```
cd ..
```

2. "It's twenty minutes past the hour, where is this guy?" you think to yourself..
Finally he arrives (30 mins late) and introduces himself - his name is Jerry. You greet him:

```
echo "Hello Jerry, my name is [your name], how are you doing?"
```

3. You lead Jerry to your apartment (your home in Linux is located in /home/[username]) where [username] is your username. There are a number of ways to get there. If some of these commands are confusing then don't worry it will be explained in the review!

```
cd /home/[username]
```

```
cd ./[username]
```

```
cd ~
```

```
cd -
```

```
cd
```

4. It's time for the tour, open the door and show the inside of the apartment:

```
ls
```

```
ls -l
```

```
ls -a
```

```
la
```

5. Oh no! Those last commands revealed some stuff you were trying to hide (ls -a shows hidden files that start with a '.'). Now he knows about your secret identity as the 'root user' - Ubuntu cities' masked superhero. You really need to be more careful about where you're leaving spare suits. Jerry uses this as blackmail to live there for next to nothing and to convince you to renovate the space to add a custom room that he will use as a music studio. You reluctantly comply:

```
mkdir studio
```

Unlike real life, in linux the renovations on your home finish in milliseconds. Take a look in your apartment again using **ls** and confirm the studio has been added.

Let's add some essentials to the music studio such as a mixer, microphone, and speakers:

```
cd studio
touch mixer
touch microphone
touch speakers
```

6. Jerry has been living there for a couple months now and he has been a horrible tenant. He is a complete psychopath, you even saw him pour milk before the cereal once. Not to mention you're going broke with the little to rent you're receiving. Worst of all, his music sucks. You decide that you would rather have the whole world knowing your secret identity than put up with this guy for another month. You want him as far away from you as possible so you ask him to move him and his studio to the root of the file system:

```
cd ..
mv studio /
    ^      ^
  Target  destination
```

Hm looks like his studio is still there, that didn't work. I could use my 'sudo' super powers to get him out of there but let's not resort to violence (yet).

7. Time to go back to our secret base and brainstorm

```
cd /root or cd ../../root
```

But of course not just anyone can enter the secret lair, we need to turn into the one and only root user!

```
sudo su
cd /root     or     cd ../../root     or     cd
```

su is short for switch user. You'll need to enter your password when prompted to execute the command. Whenever you use your super powers (sudo) you'll need to provide a password for your account - unless you did it recently then it will remember it and use it again temporarily.

8. At the comfort of your secret lair you come up with the idea to write an eviction notice. You get started on it right away:

```
echo "Dear Jerry, this is an eviction notice..." > notice.txt
```

9. Now you have your letter which is stored in 'notice.txt' in the current directory. Don't believe me? Run the `ls` command and you'll see the file. Proof read the file by putting the contents of it on your terminal:

```
cat letter.txt
```

You can make changes to the letter by opening it up in nano:

```
nano notice.txt
```

When you're done exit and save changes with Ctrl + X, y, enter

10. Before we leave the secret lair and deliver the letter, let's save a copy of it for our own records:

```
cp notice.txt ./notice-copy.txt
```

Observe that there are now two copies of the file in the current root user directory with `ls`.

11. Now let's exit the secret lair and deliver the notice to Jerry

```
exit
```

Notice we are back in your apartment (home folder) at /home/[username]. Of course, Jerry is in the music studio blasting his putrid sounds. Time to open the studio door and hand him the letter:

```
mv /root/notice.txt studio
```

Permission denied? Since when did he put a biometric lock on the door to the studio? Well looks like we need to use our super powers on this one. Either of the following will work:

```
sudo mv /root/notice.txt studio
```

```
sudo !!
```

The second option is really handy for when you forget (or didn't even realize) you needed to use sudo. !! will expand to the last command you tried to execute.

12. Jerry is shocked that you were able to bust down the door but he quickly figures out what is going on and avoids eviction by rightly pointing out that a letter that we typed up at home is not a legally binding eviction notice and is not actionable in court. The only way to get him out at this point is to hire some good lawyers but you don't have that kind of money.

Fuelled with rage, you start destroying everything in the music studio:

```
rm -rf studio
```

Fearing for his life, Jerry flees the scene and you never see him again..